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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/523,579 | 01/28/2005 | Yutaka Miyamoto | Ace 12 | 1367 |
| 23474 | 7590 | 06/28/2006 | EXAMINER | |
| FLYNN THIEL BOUTELL & TANIS, P.C. | | | KERNS, KEVIN P | |
| 2026 RAMBLING ROAD | | | ART UNIT | |
| KALAMAZOO, MI 49008-1631 | | | PAPER NUMBER | |

1725

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,579

Applicant(s)

MIYAMOTO ET AL.

Examiner

Kevin P. Kerns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☒ Claim(s) 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/18/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this instance, the abstract (as amended) continues to exceed 150 words.

Claim Objections

2. Claim 40 is objected to because of the following informalities: in the last line, replace "member" with "members" after "plate". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 43 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43 recites the limitation "the joint portion". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 23-44 insofar as definite (without a complete translation of the Japanese document JP 60-6273, for which only an abstract was provided in the IDS dated May 18, 2006) are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-6273 in view of JP 8-39261 (complete translation of JP 8-39261 provided in the previous Office Action).

JP 60-6273 discloses an apparatus and method for production of steel strip from joining hot rolled coils having different sheet gauges via electric resistance heat butt welding, in which the apparatus and method include providing coil members (1,2) having different cross-sections in a linearly arranged, supported butted relationship prior to butt welding; arranging a pair of oppositely arranged spot block electrode press members 3 (which would be held in respective electrically insulated press dies) adjacent the portion of the coil members (1,2) to be butt welded, such that each of the electrode press portions have two respective convex portions that gradually retreat from a flat intermediate portion of the electrode outer surfaces to be approximately parallel to the members; and means for causing relative movement of the electrodes 3 (force-applying arrows that show a pressing direction of electrode press members 3 to provide a press load) toward each other, such that an end face (Figure 3) of the thicker cross-section coil (2-2) deforms toward the other end face of the thinner cross-section coil (1-2) to form a weld bead in the weld zone 4, thus providing a butt welded steel strip (abstract; and Figures 1-3). JP 60-6273 does not specifically disclose the actual supporting means and that the members to be butt-welded are plate members (independent claims 24 and 43), that the two convex portions are connected to one another (claims 24 and 27), and that the butt portion extends non-linearly (claim 32).

However, JP 8-39261 discloses a welding method and apparatus that includes a single pair of roller electrode members (33,34) that include connected convex press portions upon butted plate members (11,12) having oblique-shaped (non-linear), butted end portions (while being offset from the butted portion of the plate members) to be held

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by supporting means in the form of clamps (31,32) (see Figures 3-7, 12, 14, and 17), with the single pair of electrode members also functioning as press portions, which are advantageous for providing welding of oblique-shaped end portions with short welding time and not limiting the type of material and thickness of the plate members (abstract; paragraphs [0006]-[0032] of Japanese translation; and Figures 1-7, 12, 14, and 17).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the apparatus and method for production of steel strip from joining hot rolled coils having different sheet gauges (different cross-sections) via electric resistance heat butt welding, as disclosed by JP 60-6273, by using the supporting means on plate members, the connected convex press portions formed in a single pair of electrode members, and the non-linearly extending butt portion, as taught by JP 8-39261, in order to weld oblique-shaped end portions with short welding time and not limiting the type of material and thickness of the plates (JP 8-39261; abstract).

Response to Arguments

8. The examiner acknowledges the applicants' amendment, substitute specification, and information disclosure statement (IDS) received by the USPTO on May 18, 2006. The IDS has been considered and initialed, and a copy of the IDS is provided with this Office Action. The amendments and substitute specification overcome prior objections to the specification and claims, as well as prior 35 USC 112, 2nd paragraph rejections. However, the abstract remains objected to, and a new claim objection has been raised

in new claim 40 (see above sections 1 and 2). In addition, a new 35 USC 112, 2nd paragraph rejection has been raised in new claim 43 (see section 4). The applicants have cancelled claims 1-22, while adding new claims 23-44. Claims 23-44 are currently under consideration in the application.

9. Applicants' arguments with respect to claims 23-44 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 6/24/06*
Primary Examiner
Art Unit 1725

KPK
kpk
June 24, 2006